ABSTRACT

There can be provided according to the present invention a silicon single crystal produced according to Czochralski method to which Ga (gallium) is added as a dopant characterized in that a resistivity is 5Ω · cm to 0.1Ω · cm and a method for producing a silicon single crystal to which Ga (gallium) is added as a dopant according to Czochralski method characterized in that Ga is added in a silicon melt in a crucible, a seed crystal is brought into contact with the silicon melt and is pulled with rotating to grow a silicon single crystal ingot. Thereby, a silicon single crystal and silicon single crystal wafer and a method for producing them that can produce a solar cell characterized in that photo-degradation is not caused even in the single crystal having high oxygen concentration and a conversion efficiency of optical energy is very high.